

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/006281

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H02M3/335

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H02M H02J G05F H02H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 144 187 A (BRYSON STEVEN W) 7 November 2000 (2000-11-07) abstract column 2, line 52 - line 67 column 3, line 21 - line 22 column 3, line 29 - line 31 column 5, line 22 - line 26 figure 1	1, 2, 5, 15
Y		3, 4, 6-14, 16-20
X	US 5 801 522 A (MCKENZIE PHILIP JAMES) 1 September 1998 (1998-09-01) column 3, line 1 - line 18 figures 1, 2	1, 2, 5
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

8 November 2004

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16/11/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 09, 30 September 1997 (1997-09-30) & JP 9 135598 A (NIPPON TELEGR & TELEPH CORP & NTT), 20 May 1997 (1997-05-20) abstract	1,2,5
Y	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 08, 30 August 1996 (1996-08-30) & JP 8 107680 A (NIPPON ELECTRIC IND CO LTD), 23 April 1996 (1996-04-23) abstract	3,4, 6-14, 16-20
Y	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 09, 30 September 1997 (1997-09-30) & JP 9 117147 A (YUASA CORP), 2 May 1997 (1997-05-02) abstract	3,4, 6-14, 16-20
Y	US 6 229 681 B1 (LEE JOO-HYOUNG) 8 May 2001 (2001-05-08) column 1, line 17 - line 27 column 4, line 4 - line 9 figure 1	4,12,17
Y	US 5 859 768 A (ALBERKRACK JADE H ET AL) 12 January 1999 (1999-01-12) column 8, line 2 - line 4 figures 1,5	4,12,17
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 04, 31 May 1995 (1995-05-31) & JP 7 031136 A (NEC CORP), 31 January 1995 (1995-01-31) abstract	1,5,15
A	US 6 252 783 B1 (HUH DONG-YOUNG ET AL) 26 June 2001 (2001-06-26) cited in the application abstract figure 1	1,5,15

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Information on patent family members

International Application No

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